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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/694,058 | 10/28/2003 | Sinikka Sarkkinen | 1135.42233X00 | 3865 |
| 20457 | 7590 | 12/06/2005 | EXAMINER | |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873 | | | MANOHARAN, MUTHUSWAMY GANAPATHY | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2683 | |

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--|---|--|
| Office Action Summary | Application No. 10/694,058 | Applicant(s) SARKKINEN ET AL. | |
| | Examiner Muthuswamy G. Manoharan | Art Unit 2683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to because the message numbers are not in order (The message number 5 is sent after the message number 7). Correction and /or clarification are required.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

"Only those serving radio network controller (SRNC) are sending an indication to the controlling radio network controller (CRNC) which have multicast/broadcast multimedia service (MBMS) authorized user equipment (UE) for the service in question (Paragraph [0020])."

"The controlling radio network controller (CRNC), after having received the MBMS CRNC service context request both establishes the MBMS ..." (Paragraph [0039]).

"The number of the user equipment UE can be gathered by comparing the location information of the user equipment" (Paragraph [0043], line 6).

"Thus, after receiving the MBMS config. Info, the serving radio network control SRNC actives the included indications into the RRC active set" (Paragraph [0040], lines 1-2).

"When only the Anchor Radio Network Controller concept is supported" (Paragraph [0021]. It is not clear what the "Anchor Radio Network Controller concept" is.

"Fig 2 presents the case when no MBMS CRNC service context is established in a controlling radio network controller CRNC, and therefore the controlling radio network

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controller CRNC rejects to couple the user equipment UE specific MBMS to the context in CRNC”.

“includes the MBMS service into the radio resource active set” (Paragraph [0042], lines 10-11)

The specification appears to be a literal translation into English from foreign document and is replete with grammatical and idiomatic errors.

Correction/clarification required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,2,4,5,6, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, Applicant recites “establishing a user equipment specific multicast/broadcast context by the serving device of the core network, wherein this establishing procedure is capable of being effected upon a different time as the controlling device multicast/broadcast service context establishing procedure”. It is not clear what the Applicant meant by this establishing procedure is capable of being effected upon a different time as the controlling device multicast/broadcast service context establishing procedure.

Regarding claim 1, Applicant recites, "establishing a multicast/broadcast service context of a controlling device by a serving device of the core network". This recitation is not consistent with the specification (Paragraph [0039], lines 1-5) and the Figure 1 (step 4).

Regarding claim 2, Applicant recites, "multicast/broad cast service context is activated". It is not clear whether MBMS service context specific to controlling device or user equipment or both.

Regarding claim 2, Applicant recites, "multicast/broadcast context". There is no antecedent basis for the multicast/broadcast context.

Regarding claim 3, Applicant first recites, "the selecting step and the selection informing step are not performed" and then recites, "informing step includes an indication about the unsuccessful coupling of the respectively joined user equipment to the multicast/broadcast service". If the informing step is not performed, then it does not matter whether that particular informing step includes some thing else or not.

The recitation of "serving device" in claims 4,6 and 8 are unclear as to whether the serving device is from the core network or from the radio access network.

Regarding claim 5, the phrase "the multicast/broadcast service context is not activated and the serving device of the radio access network does not take this activated multicast/broadcast context," renders the claim vague and indefinite. Also, it is not clear whether the Applicant meant MBMS service context or user specific MBMS context.

Regarding claim 6, Applicant recites, "the use of the user equipment specific dedicated channels for the multicast/broadcast service is rejected". It is not clear as to how one can reject the use of the user equipment specific dedicated channels.

Regarding claim 7, Applicant recites, "A serving device of a core network comprising: means for the handling of an unsuccessful context information from the serving device" is unclear as to why the serving device handling information from the same serving device.

Clarification and/or correction required.

Regarding claim 8, Applicant recites, "the successful coupling". There is no antecedent basis for the successful coupling.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being vague and indefinite. This claim is a Hybrid claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected, under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling.

Applicant recites, " MBMS service context information" and "user equipment information specific to MBMS service" without disclosing the exact contents of the MBMS UE context and MBMS service context.

Regarding claim 2, Applicant recites, "activated multicast/broadcast context is taken into account" without disclosing the exact contents of the multicast/broadcast context.

Regarding claim 4, Applicant recites, "the multicast /broadcast service informed in the multicast/broadcast service context of the controlling device" without disclosing the exact contents of the multicast/broadcast service context of the controlling device.

Regarding claim 5, Applicant recites, "activated multicast/broadcast context into account" without disclosing the exact contents of the multicast/broadcast context.

Regarding claim 6, Applicant recites, "unsuccessful context support" without disclosing the exact contents of the unsuccessful context information.

Regarding claim 7, Applicant recites, "unsuccessful context information" without disclosing the exact contents of the unsuccessful context information.

The contents of the MBMS UE context and MBMS service context are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,5,7,8 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by (3GPP TS 25-346, V1.1.0 (2002-5)) (hereinafter Ref. A).

Regarding claim 1, Ref. A teaches a method of coupling user equipment information specific to a multicast/broadcast service with a multicast/broadcast service context of a controlling device, wherein a multicast/broadcast service is provided within a communication network comprising a core network and a radio access network, the core network comprising at least one serving device, and the radio access network comprising a plurality of user equipment, at least one serving device, and controlling devices, the method comprising: establishing a multicast/broadcast service context of a controlling device by a serving device of the core network (Section 5.1.1, lines 9-10); establishing a user equipment specific multicast/broadcast service context by the serving device of the core network (section 7.1.3; lines 1-4), wherein this establishing procedure is capable of being effected upon a different time as the controlling device multicast/broadcast service context establishing procedure; determining a respective location of user equipment which desire to join the broadcast service by a serving device of the radio access network by checking a respective list received from the serving device of the core network (Section 7.1.1; lines 6-7); sending a user equipment active list by the serving device of the radio access network informing the controlling device about the number of joined user equipment and the multicast/broadcast service in question, wherein the active list includes, if applicable, also respectively joined user equipment within a cell controlled by another controlling device (Section 7.1.3, lines 1-4); selecting a channel type by the controlling device (Figure 2; Section 7.1.2, lines 4-5)

for the connection of the multicast/broadcast service to the respectively joined user equipment, informing the serving device of the radio access network about the selection; activating the multicast/broadcast service context in the serving device of the radio access network as an accepted service for the user equipment after receipt of successful coupling information from the controlling device (Ref. A, Figure 2); and informing the respectively joined user equipment by the serving device of the radio access network about the multicast/broadcast service (Ref. A, Figure 2, Section 7.1.2).

Regarding claim 5, Ref. A teaches the method according to claim 4, wherein if the decision about using user equipment specific dedicated channels for multicast/broadcast service informed in the service context is rejected or the decision to use the user equipment specific dedicated channels is negative, the multicast/broadcast service context is not activated and the serving device of the radio access network does not take this activated multicast/broadcast context into account when Radio Resource Controlling states for the user equipment are defined (Ref A., Section 5.1.1; lines 11-20).

Regarding claim 7, Ref. A teaches a serving device of a core network comprising: means for establishing a multicast/broadcast service context of a controlling device of a radio access network (Section, 7.1.1, Figure 1, line 3), means for establishing a user equipment specific multicast/broadcast service context at a different time (Section 7.1.2; Figure 2); means for sending a list of respective locations of user equipment which desire to join the multicast/broadcast service (Section 7.1.1; lines 6-7);

and means for the handling of an unsuccessful context information from the serving device (Section 7.1.4; Page 10, lines 9-10).

Regarding claim 8, Ref. A teaches a serving device of a radio access network, comprising means for determining a respective location of user equipment which desire to join a multicast/broadcast service by checking a respective list received from a serving device of a core network (Section 7.1.1, lines 5-7), means for sending a user equipment active list informing a controlling device of the radio access network about the respective number of user equipment which join respective multicast/broadcast services in question, wherein the active list includes, if applicable, also respectively joined user equipment within a cell controlled by another controlling device of the radio access network (Section 5.1.1, lines 2-4); means for activating the multicast broadcast service in the serving device as an accepted service by the controlling device after receipt of information about the successful coupling (Ref. A, Figure 2; Section 7.1.2); means for informing the respectively joined user equipment about the multicast/broadcast service (Ref.A, Section 7.1.2, Figure 2) ; means for deciding whether the multicast/broadcast service can be served to user equipment by using the user equipment dedicated specific channels after an unsuccessful coupling in the controlling device, and means for using received information about successful coupling when the Radio Resource Controlling (RRC) state for the user device is updating (Ref A, Section 5.1.1, lines 17-20).

Regarding claim 9, Ref A teaches a controlling device of a radio access network, comprising: means for selecting a channel type (Section 7.1.2; Figure 2 and Page 9,

lines 1-6) for the connection of a multicast/broadcast service to respectively joined user equipment, means for informing a serving device of the radio access network about the selection (Section 7.1.2; Figure 2 and Page 9, lines 1-6), and means for informing the serving device of the radio access network about an unsuccessful coupling of the respectively joined user equipment to the multicast/broadcast service (Section 7.1.4; Page 10, lines 9-10).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

"Multimedia Broadcast/Multicast Service; Architecture and Functional Description" 3GPP TR 23.846 2.0.0, September 2002 (2002-09).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muthuswamy G. Manoharan whose telephone number is 571-272-5515. The examiner can normally be reached on 7:30AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600